

REMARKS

Status Summary

Claims 1-21 are pending in the present application. Claims 1, 4-6, 10, and 11 presently stand rejected, and claims 1-21 have been objected to. As indicated above, claims 1-6 and 8-21 have been amended and claim 7 has been canceled. No new matter is thought to have been added by these amendments.

Claim Objections

Claims 1-21 are objected to by the Examiner because of informalities. Specifically, the Examiner states that element identifiers included in claims 1-21 should be deleted to eliminate any confusion and potential 112 problems. Claims 1-6 and 8-21 have been amended to delete these element identifiers, and claim 7 has been canceled.

In addition, claim 8 is objected to because the word "equidistant" at the end of the claim is not understandable. Claim 8 has been amended to recite "wherein the reference potentials are provided in equidistant fashion." It is thought that this claim as amended now provides sufficient definiteness for the disclosure of equidistant reference potentials.

Claims 1 and 10 are objected to as requiring the word "wherein" at the beginning of one clause in each of the claims. Claim 1 has been amended to recite "wherein the quantizing device having fewer than  $2^N-1$  comparators..." and claim 10

haws been amended to recite “wherein the quantizing device applying a potential offset...” as suggested by the Examiner.

Claims 2-4, 6-9, and 12-20 are objected to for using the phrase “characterized in that” rather than the word “wherein”. Claim 7 has been canceled, and claims 2-4, 6, 8, 9, and 12-20 have been amended to recite “wherein” in the preamble of each of the claims as suggested by the Examiner.

Claims 4, 11, and 21 are objected to for using the phrase “characterized in that provision is made of” rather than the phrase “further comprising.” Because claim 4 does not contain the phrase “in that provision is made of”, it is assumed that the Examiner intended for this objection to cover claim 5, which does contain this phrase. Likewise, claim 11 does not contain the phrase “in that provision is made of”, but it does contain the phrase “characterized in that ... is provided.” Accordingly, claims 5, 11 and 21 have been amended to recite “further comprising” in the preamble of each of the claims as suggested by the Examiner.

Claim 20 is objected to because the Examiner considers the phrase “the bit of the compensation” to be indefinite. It is assumed that the Examiner is referring to the phrase “the bit width of the compensation analog-to-digital converter”. Claim 20 has been amended to recite “wherein the compensation analog-to-digital converter has a bit width that corresponds to the number of comparators.” It is thought that this claim as amended provides sufficient definiteness for the disclosure of a compensation analog-to-digital converter with a bit width that advantageously corresponds to the number of comparators in the quantizing device.

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Finally, claims 4-6, 8, 9, 12, 14, 16-19, and 21 have been amended to change their dependencies. Specifically, claims 4, 5, 8, and 9 have been amended to depend upon claim 1 only; claim 6 has been amended to depend upon claim 4 only; claims 12, 16, and 19 have been amended to depend upon claim 10 only; claim 14 has been amended to depend upon claim 11 only; claims 17 and 18 have been amended to depend upon claim 14 only; and claim 21 has been amended to depend upon claim 19 only.

In view of the remarks and amendments indicated above, it is respectfully requested that the Examiner's objections to claims 1-21 be withdrawn.

Claim Rejection - 35 U.S.C. § 102

Claims 1, 4-6, 10, and 11 stand rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,346,898 to Melanson. Specifically, with reference to independent claims 1 and 10, the Examiner contends that Figures 4 and 5 of Melanson teach an input (102), an output (110), a summing device (105), a filter (101), a DAC (104), and a clock quantizer (404). The Examiner further contends that the specific features of the quantizer recited in claims 1 and 10 are also taught by Figure 5 and the disclosure of Melanson.

Similarly, claims 1, 4-6, 10, and 11 stand rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,642,873 to Kuang. Specifically, with reference to independent claims 1 and 10, the Examiner contends that Figures 4 through 6 of Kuang teach an input, an output, a summing device (101),

a filter (102), a DAC (104), and a clock quantizer (103). The Examiner further contends that the specific features of the quantizer recited in claims 1 and 10 are also taught by Figure 5, Figure 6, and the disclosure of Kuang.

The positions of the Examiner as summarized above with respect to claims 1, 4-6, 10, and 11 are respectfully traversed as described below.

As indicated above, both claims 1 and 10 have been amended to recite "wherein the quantizing device has at least one first, second and third comparator each having a first and a second input and an output, the filtered signal being applied to the first inputs, the outputs each supplying a comparison result and a first, second and third reference potential being switched to the second inputs, the second reference potential lying between the first and third reference potentials and being closest to the potential of the filtered signal." This feature was previously recited in claim 7 of the originally filed application. The Examiner has not asserted that the subject matter of previously presented claim 7 is taught or suggested by either of Melanson or Kuang, and accordingly it is respectfully submitted that the subject matter of currently amended claims 1 and 10 is not taught or suggested by either reference.

In addition, applicants submit that neither Melanson nor Kuang seem to disclose that the quantizing device has fewer than  $2^N-1$  comparators which is recited in both independent claims 1 and 10.

As a result, it is respectfully submitted that claims 1 and 10 are now in proper condition for allowance. In addition, because claims 4-6 depend upon claim 1 and

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claim 11 depends upon claim 10, it is submitted that these claims are likewise in proper condition for allowance.

### CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

### DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

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